



Description

Metal housing, 150 m laser opposed, 30 m laser retro-reflective, 25 m laser polarized retro-reflective, 4 m laser BGS diffuse, coaxial technology, no blind zone, precise positioning, wide voltage supply, relay output. Suitable for automotive manufacturing, metallurgical industry, non-standard equipment, textile machinery and others.

Features

- BGS function greatly improves the detection effect
- Long detection distance
- Adjust the sensitivity by knob
- IP67 protection class
- Push-pull / relay output

Type

The detection distance corresponds to the reflector RB50*50-1

| Detection mode | Type | Distance | Light source | Frequency | Output | Switching mode | Connection | Wiring |
|----------------------------|--------------------|----------|-----------------------------------|--------------|---------------|--------------------|---------------------|--------|
| Opposed | OSM70-SL6 | 150 m | Laser | --- | --- | --- | 2 m cable | Fig. 1 |
| | OSM70-ELVB6 | 150 m | --- | 800 Hz | Push-Pull | Light on / Dark on | 2 m cable | Fig. 4 |
| | OSM70-SL6Q | 150 m | Laser | --- | --- | --- | M12 4-pin connector | Fig. 2 |
| | OSM70-SL5 | 150 m | --- | 800 Hz | Push-Pull | Light on / Dark on | M12 4-pin connector | Fig. 4 |
| | OSM70-ELVB6Q | 150 m | Laser | --- | --- | --- | 2 m cable | Fig. 3 |
| | OSM70-ELVR5 | 150 m | --- | 50 Hz | Relay | Light on / Dark on | 2 m cable | Fig. 5 |
| Retro-reflective | OSM70-RLVB6 | 30 m | Laser | 800 Hz | Push-Pull | Light on / Dark on | 2 m cable | Fig. 6 |
| | OSM70-RLVB6Q | 30 m | Laser | 800 Hz | Push-Pull | Light on / Dark on | M12 4-pin connector | Fig. 4 |
| | OSM70-RLVR5 | 30 m | Laser | 50 Hz | Relay | Light on / Dark on | 2 m cable | Fig. 5 |
| Polarized retro-reflective | OSM70-RPLVB6 | 25 m | Laser | 800 Hz | Push-Pull | Light on / Dark on | 2 m cable | Fig. 6 |
| | OSM70-RPLVB6Q | 25 m | Laser | 800 Hz | Push-Pull | Light on / Dark on | M12 4-pin connector | Fig. 4 |
| | OSM70-RPLVR5 | 25 m | Laser | 50 Hz | Relay | Light on / Dark on | 2 m cable | Fig. 5 |
| BGS TOF | OSM70-AKL3000VB6 | 3 m | Infrared laser + Laser indication | 20 ... 50 Hz | Push-Pull | Light on / Dark on | 2 m cable | Fig. 6 |
| | OSM70-AKL3000VB6Q | 3 m | Infrared laser + Laser indication | 20 ... 50 Hz | Push-Pull | Light on / Dark on | M12 4-pin connector | Fig. 4 |
| | OSM70-AKL3000VR5 | 3 m | Infrared laser + Laser indication | 20 ... 50 Hz | Relay | Light on / Dark on | 2 m cable | Fig. 5 |
| | OSM70-AKL3000C2B6 | 3 m | Infrared laser + Laser indication | 20 ... 50 Hz | 2 x Push-Pull | Light on / Dark on | 2 m cable | Fig. 7 |
| | OSM70-AKL3000C2B6Q | 3 m | Infrared laser + Laser indication | 20 ... 50 Hz | 2 x Push-Pull | Light on / Dark on | M12 4-pin connector | Fig. 8 |
| | OSM70-AKL4000VB6 | 4 m | Infrared laser + Laser indication | 20 ... 50 Hz | Push-Pull | Light on / Dark on | 2 m cable | Fig. 6 |
| | OSM70-AKL4000VB6Q | 4 m | Infrared laser + Laser indication | 20 ... 50 Hz | Push-Pull | Light on / Dark on | M12 4-pin connector | Fig. 4 |
| | OSM70-AKL4000VR5 | 4 m | Infrared laser + Laser indication | 20 ... 50 Hz | Relay | Light on / Dark on | 2 m cable | Fig. 5 |
| | OSM70-AKL4000C2B6 | 4 m | Infrared laser + Laser indication | 20 ... 50 Hz | 2 x Push-Pull | Light on / Dark on | 2 m cable | Fig. 7 |
| | OSM70-AKL4000C2B6Q | 4 m | Infrared laser + Laser indication | 20 ... 50 Hz | 2 x Push-Pull | Light on / Dark on | M12 4-pin connector | Fig. 8 |

Technical Data

| | |
|--------------------------------|---|
| Operating voltage | 10 ... 30 V DC (push-pull), 24 ... 240 V AC/DC (relay) |
| Ripple voltage | ≤ 10% |
| Switch output | Push-Pull, Relay |
| Output characteristics | Light on + dark on |
| Repeatability | ≤ 3% |
| Light source | Opposed / retro-reflective: red laser (658 nm) / class 2; TOF: infrared laser (940 nm) + indication laser (658 nm) / class 1 |
| Spot diameter | 5 mm@7 m, 15 mm@20 m (Opposed, Etro-reflective); 2*4 cm@1 m, 7*5 cm@2 m, 14*7 cm@4 m (Diffuse detection light source) |
| No-load current | ≤ 30 mA |
| Load current | ≤ 450 mA (push-pull), ≤ 3 A (relay) |
| Protection circuit | Reverse polarity protection (push-pull), short circuit protection, surge protection (relay), overload protection |
| Housing material | Die cast zinc |
| Connection | M12 connector / 2 m cable |
| Operating temperature | -25 ... +55 °C; -30 ... +55 °C (OSM70-AKL4000) |
| Storage temperature | -40 ... +70 °C |
| Operating environment humidity | 35% to 85% RH (no condensation) |
| Detection mode | BGS, window mode, FGS (OSM70-AKL3000) |
| Voltage resistance | 1000 V/AC 50/60 Hz 60 s |
| Insulation impedance | ≥ 50 MΩ (500 V DC) |
| Shock resistance | Complex amplitude 1.5 mm 10 ... 50 Hz (2hr X, Y, Z respectively) |
| Impact resistance | 500 m/s ² (50 G) 3 times X, Y, Z respectively |
| Protection class | IP67 |
| Dimensions | 27 × 54 × 84 mm |

Wiring

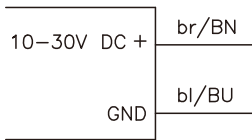


Fig. 1

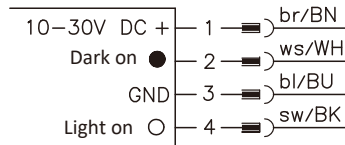


Fig. 4

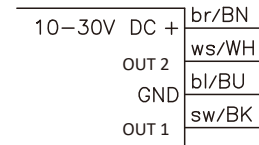


Fig. 7

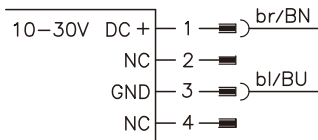


Fig. 2

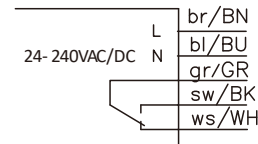


Fig. 5

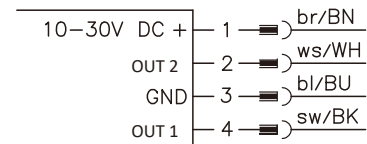


Fig. 8

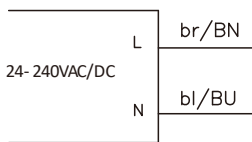


Fig. 3

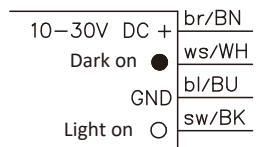
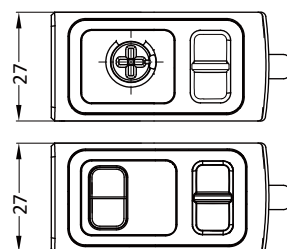
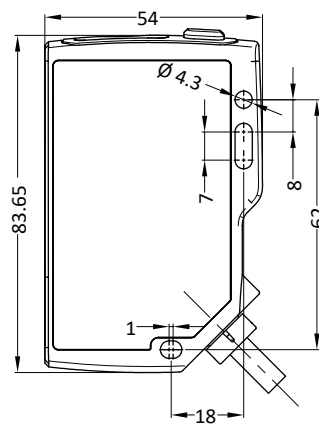


Fig. 6

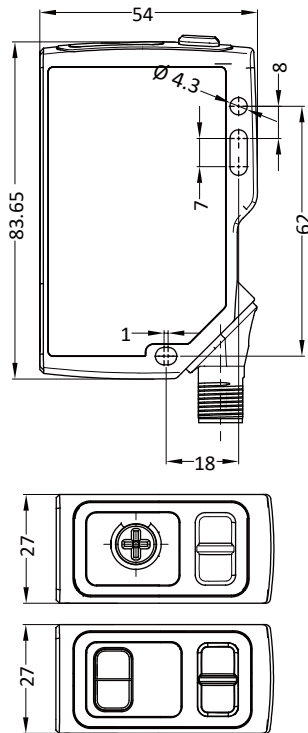
Dimensions

Cable



Dimensions

M12 connector



Reflector

RB50x50-1

